



There's a lot we'd like to tell you about the John Deere X350 mower. It has an Accel Deep™ Mower Deck for a precision cut, an optional bagging system that keeps clippings under control, and countless attachments that keep it useful through every season. But if you really want to know what year-round versatility feels like,

#### YOU JUST HAVE TO GET IN THE SEAT.



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It's 5 o'clock on a Saturday and you're sitting on the deck sipping an iced tea and looking out at the velvet-green expanse of your freshly-cut lawn with a sense of satisfaction. After a long session on your mower, it's this moment that makes the work worthwhile.

Welcome to The Yard, a magazine for people who understand moments like these, people who know the responsibility-and pleasureof being good stewards of their land, people who take pride in caring for it themselves.

In The Yard you'll find information and advice on tractor maintenance, keeping your lawn healthy and green, and the art and science of mowing, but you'll also find ideas on how to make the most of outdoor living. From the DIY projects that will help you host family and friends to the recipes and barbecue tips that will earn their highest praise, The Yard is the magazine for the way you live.

Cheers.

THE EDITORS



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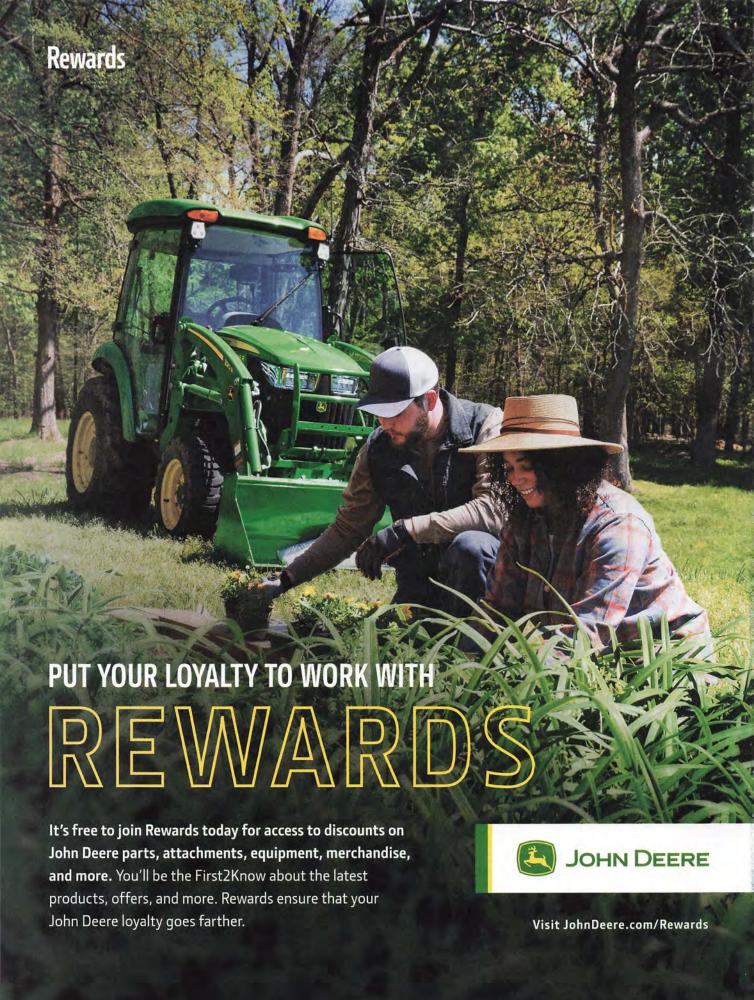
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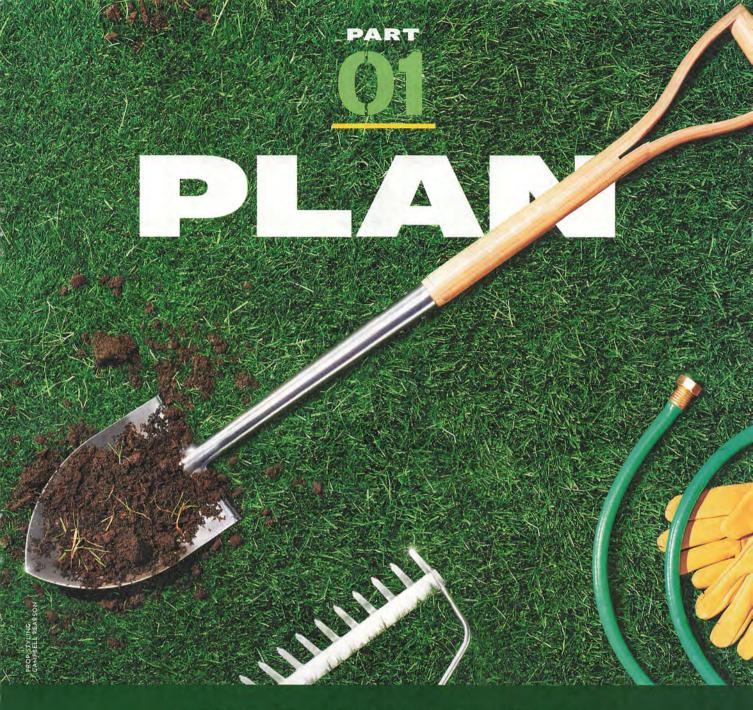
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The making of an awesome lawn starts long before spring's first mow. Spend the preseason prepping your lawn, improving your soil, and welcoming your mower back to work.





#### MASTER THE PRESEASON Winter has probably

Winter has probably made a mess of your yard. It's time to tidy up.



#### PEAK SOIL

Your grass will only grow if the earth it's growing in is healthy. Here are the ground rules to great soil.

### I'm a contractor.

so I rely on my tractor to help me make a living practically every day. While I do everything from bathrooms and kitchens to basement renovations, I specialize in decks and backyard makeovers, which means earthwork and landscaping. I also do snow removal, storm recovery and mow a few lawns now and then. None of this would be possible without my Power Trac PT-425. When it's not working, *I'm* not working, so maintenance is key.

I trust my dealer to handle the complicated stuff–like electrical issues and new tires–but I can do a lot of the basics myself, including prepping my tractor for its busy season. Over the years, I've learned that some springtime prep and regular maintenance along the way are the single most important factors in keeping your machine running smoothly. Here's everything you need to make a strong start.

#### **Season Ready**

The awesome thing about tractors is that they're never fussy or hard to read: They're usually either full-bore "let's go" mode or they're not working at all. Unlike your car, which is packed with complex electronics and an absurd amount of processing power, tractors are largely about the fundamentals—fuel, air, and spark—so there's a lot for a DIYer to do on their own.

While some work should definitely be left to the pros, you can do a lot with an air compressor, a ratchet set, and a basic understanding of how an internal combustion engine functions. Make friends with your owner's manual: It can tell you just about everything you need to know about keeping your tractor in great condition.

# A few hours of preseason prep will set you—and your workhorse tractor—up for a hassle-free season.

BY MARK CLEMENT



FREQUENCY: Monthly WHAT TO CHECK: Oil, hydraulic fluid, and transmission reservoirs.

Depending on the age, wear, and tear of your machine, checking fluids—mainly oil—should be a regular activity. If you have an older machine or one that's used infrequently, you may want to check almost every time you use it. If your machine has hydraulics, you'll need to make sure there's enough compatible hydraulic fluid in the reservoir, and you should start the season by filling it or changing it completely. Hydraulic fluid can last for years, but it can go bad (one way to tell is by making sure the fluid is the right color; if it turns white, it's gone bad).

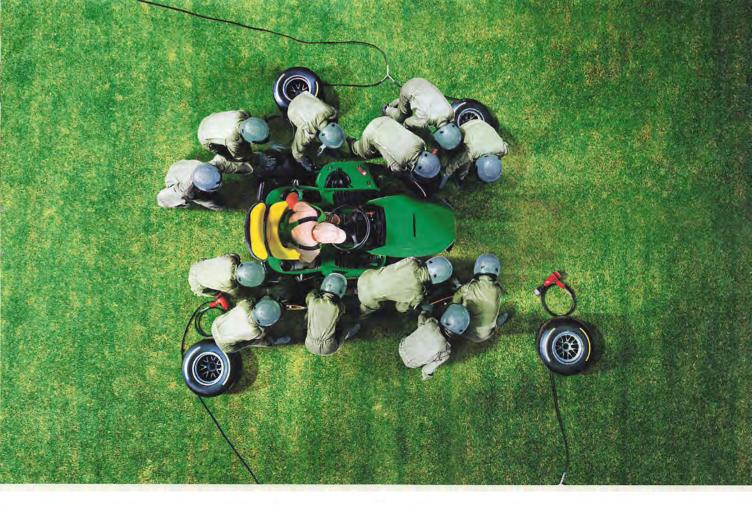
# RO TIPS

- Check fluids before starting the unit.
- If oil is black, it's dirty. Get an oil change.
- If oil's in the bottom third of the dipstick, top it off. If it is consistently low, check for leaks.
- Hydraulic fluid and transmission fluid may or may not be the same fluid and reservoir. It's your job to find out. Never manipulate a hydraulic line with the machine running.
- Keep fluids handy at all times.
- If hydraulic fluid is leaking, dirt is also getting in the system.

#### Why it matters

Clean fluids are your tractor engine's life blood. Without them—or without enough of them—you risk the worst-case scenario: a seized engine.

The cleanliness and levels of your fluids make the machine run better and lower the overall stress on the unit in operation.



#### 2> GREASE

FREQUENCY: Every 10 hours of operation WHAT TO CHECK: There's nothing to check with Zerks other than keeping track of the hours since the last time you checked.

Hydraulic machines also have grease fittings, often called Zerk fittings. Using a grease gun to add compatible grease every 10 or so hours of operation is essential. Buying grease from the dealer ensures you're using a compatible grease formula. Simply use the grease gun to inject new grease in and push old grease out.

# SOLL OF

- A grease gun with a solid—rather than flexible—nozzle may engage the Zerk more easily.
- Engaging the Zerk requires seating the nozzle. Disengaging it requires an eccentric twist and pull.
- It takes several pumps to get grease in (stop when old grease comes out). If Zerk doesn't accept grease, change it.
- Learn where Zerks are by checking the owner's manual.

#### Why it matters

The same reason fluids matter: Loaders and mowers endure incredible stresses. Grease reduces the friction and heat on the steel, allowing the unit to work as it was designed to.

#### 3> SPARK

FREQUENCY: Annually WHAT TO CHECK: The condition of the current plugs and that the wire head is fully seated after it's installed.

If you're running your machine a lot and experiencing hard starts or bumpy performance, check the plugs using a ratchet set with deep sockets. If they're black with carbon, they need to be replaced. The type of plug you'll need is written on the ceramic part of the plug. Depending on use, plugs should generally be swapped out annually.

#### 2

- Use the socket extension in your ratchet set for easier reach.
- Don't overtighten new plugs; pros use a torque wrench to seat the plug to a manufacturer specification.
- Add a dab of dielectric grease to the boot hub (the hook at the base). This helps manage any moisture in the system.
- Make sure to seat wire heads on new plugs.
  - If the unit is running rough and idling hard, be sure to check the air filter along with the plugs [see next page].

#### Why it matters

Fluids may be an engine's life blood, but the spark is the beginning of the power cycle. A weak, inconsistent spark from a dirty plug is inefficient. The unit can idle roughly, work harder to accelerate or decelerate, and consume more fuel all at the same time.

#### **Ask an Expert**

Doing basic maintenance checks is the single most important thing you can do to get your tractor ready for the busy season. So make sure you understand what the different service points are and how often to perform them."

Mark Davey, John Decre's go-to-market manager for compact tractors

#### 4>AIR

**FREQUENCY:** Every 25 hours of operation **WHAT TO CHECK:** The air filter will often be in a housing somewhere near the top or front of the engine. Remove the housing, and check the filter.

Lawn care can be dusty and dirty—or it is if you're doing it right. Air filters keep all that mung out of the engine where it can wreak havoc. Clogged air input means the engine is starved for the oxygen it needs to combust fuel properly. Accessing and replacing filters is typically an easy DIY. Clean it every 25 operating hours; replace it once per season.

# O TIPS

- Locating the air filter is the hardest part. If you're having trouble, just consult your owner's manual.
- If your property is particularly dusty or you find yourself moving lots of gravel or dry soil, keep an extra air filter on hand.
- If your unit is running rough and the filter is a mess, blow it out with compressed air to get through the day, then replace.

#### Why it matters

Internal combustion engines need three things for the combustion to work: fuel, fire, and air. Limited air means limited performance.

#### 5> BLADES

FREQUENCY: Once midseason WHAT TO CHECK: Hours and blades

Sharp tools work better. Period. Chisels, chef's knives, saw blades, your brain ... and lawn mower blades are no exception. A dull mower blade will leave a jagged, abusive rip on your lawn when it's a nice clean cut you're after. Blade sharpness can also improve the health of your lawn because yanking and pulling on the grass is more stressful to it than the sharp slice a well-tuned blade can deliver. Assuming weekly mowing of an acre or so where the terrain is known and there is a mowing season, sharpening may only be required once midseason. Property size, rocks, and roots all play a role. Pro mow and blow guys use 25 hours of operation as a benchmark.

LIDS

- Find a clear, level place to get under your mower deck safely.
- Bench grinders can work for blade sharpening, but not where the blade curves. Use an angle grinder with flapper wheel.
- A Dremel® tool with a sharpening stone or a bench sander can be used to retune and sharpen blades.
- Before reinstalling the blade, balance it. Set a nail or screw in the wall and place the blade on it, whichever side is lower is heavier and needs more steel removed.

#### Why it matters

Dull blades tend to tear grass instead of slicing it.
And grass that is healthy is the name of the game.

With a tractor, it's important to keep things properly greased to get that motion that you're looking for out of them without wearing down the components. If you don't, you'll be looking at big repair bills down the road."

Mark Davey

#### 6> MOWER

FREQUENCY: Midseason or monthly
WHAT TO CHECK: Underside of mower deck

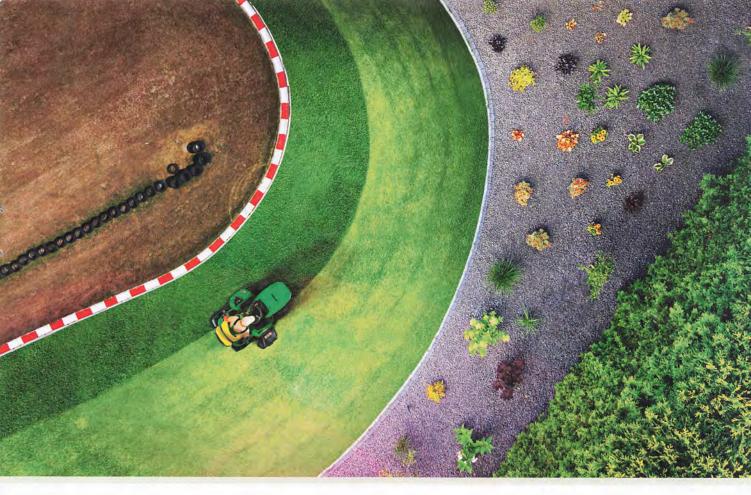
Cleaning the underside of the mower deck is easy and important. Whether you side-discharge or mulch, grass clippings pile up under there. A routine check-in is key to mower performance.

# PRO TIPS

- If your unit has a waterhose interface, follow the blade sharpening schedule. If it doesn't, make a visual check midseason or monthly.
- If you get a lot of rain or are dealing with overgrown acreage, check every couple of mows for buildup.

#### Why it matters

The blades need time and volume of grass to turn a 1-inch grass clipping into microbits. The mower deck is designed to do this when clean, not jammed up with wet grass that has fused to the underside of the deck.



#### 7> TIRES

FREQUENCY: Monthly

WHAT TO CHECK: Tire pressure

As a contractor, I own an air compressor, which I use to inflate tires on my tractor. The size of the tire matters. My compressor pumps about 1 pound per second. So a 20 PSI tire requires 20 seconds of air. On a larger tire, this works. But smaller tires are a different story. They fill much faster (ask me how I know), so be careful. Or use a bicycle pump. A tire that explodes in front of you is not that awesome.

### IDS

- Check with the dealer or auto parts store about the correct tire gauge for your unit.
- You may need a large-tire pressure gauge for bigger machines.
- Unless there's an obvious problem, tire pressure should be checked monthly per manufacturer requirements—especially if snow removal is part of your tractor duty, as colder temperatures saps tire pressure.

#### Why it matters

Tractors are heavy. They need to travel on a balanced base—that is, properly inflated tires. For four-season users, tire pressure should be optimal year-round.

#### 8> FUEL

FREQUENCY: As your fuel runs out What to check: Fuel source

Several operators and mechanics insist typical gas station fuel isn't the best for tractors. Tractors have more rubber components than cars do, and ethanol tends to corrode rubber parts. A deteriorated rubber fuel line may deliver corroded rubber into the gasoline vapor produced by the carburetor and eventually clog the carb fuel lines. It may decay the rubber gasket under your fuel cap and introduce rubber into the gas tank. And by "may" I mean it happened to me.

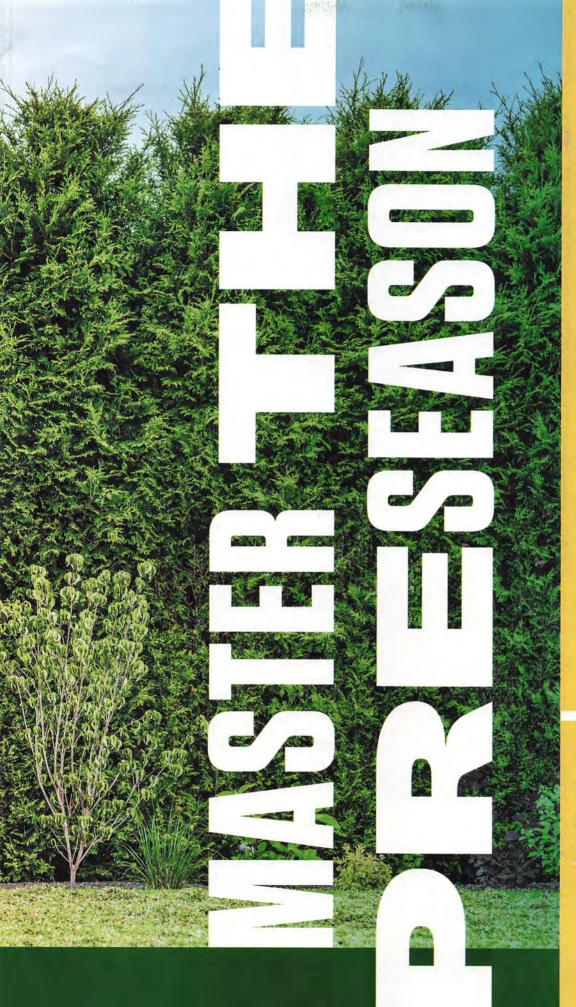
# RO TIPS

- Locate no-ethanol fuel sources in your area.
- Store an extra gas can if fuel sources aren't close to you.
- Use fuel stabilizer.

#### Why it matters

The only thing that should ever be in your fuel line is fuel.





Before
you even
think of
starting up the
mower, you've
got some chores
to do. Here
are five earlyspring tasks to
lay a foundation
for a healthy,
vibrant lawn.
You'll thank
you later.

RENEE FREEMON MULVIHILL



#### CLEAR DEBRIS

When temperatures start to rise and the soil is not too wet, get out and rake away leaves, twigs, and any debris that's found its way onto your lawn. If you left leaves around flower beds to serve as winter protection—and the danger of frost has passed—now's the time to go ahead and rake them away. This is also a good time to replenish mulch around trees and shrubs.

## 2 REMOVE

Thatch is the layer of living and dead plant stems and roots that accumulates between the living grass in your lawn and the soil surface. A thin layer of thatch is beneficial, helping the soil retain moisture and fortify the grass so it can hold up to foot traffic. But if the layer of thatch becomes more than one-half inch thick, it can lead to problems that will end up hurting your lawn.

You may notice that your lawn requires more frequent watering or that pesticides and fertilizers seem ineffective. This may be because the layer of thatch is restricting their flow. If you see a thick layer of thatch, you'll want to mitigate it before the season progresses. Core aeration can help (see No. 3) but you can

also use a tow-behind dethatcher or a vertical mower.

These dethatching machines feature revolving blades that cut through the layer of thatch and bring it to the surface. You can adjust how far the blades penetrate according to the depth of the thatch layer that has accumulated. Run the dethatcher across your whole lawn in one direction, then make a second pass that's perpendicular to the first. After that, rake and remove the debris.

#### 3 AERATE SOIL

Soil compaction can lead to several issues that can do a number on your lawn, such as water runoff, soil erosion, and thatch buildup. You can head these off with annual lawn aeration (inserting hollow spikes into the ground or removing plugs of soil), which helps grass access more water and nutrients, improves drainage, and, by boosting the health of the roots, can even make your



## DOES MY LAWN NEED TO BE AERATED?

There's a simple test you can do to find out. Just probe moist soil with a screwdriver; if it goes into the soil easily, you may not need to do anything. But if you feel resistance, your lawn could be compacted and would benefit from aeration.

If you have just a small patch of lawn that you need to aerate, a spading fork can work. Simply push the tines into the soil at least 4 inches and rock the fork back and forth. In order to treat your whole property, you may need to rent a core aerator. These machines are available at many home and garden stores and equipment rental centers. But they are fairly heavy and bulky, so you may want to consider renting one with a neighbor or at least bringing someone along to lend an extra hand.

These machines feature spoon-shaped tines or hollow tubes that remove plugs of soil from your lawn. Make sure tines are spaced about 2 to 3 inches apart. Plan to go across your lawn twice, heading in a perpendicular direction for the second lap. After you aerate the lawn, proceed with reseeding any bare patches of lawn if needed or applying fertilizer or weed control products.

#### Ask a Pro: The case for being patient

Folks are really eager to get out and fertilize and overseed their lawn, but those two can't be done at the same time. Your grass seed will be useless if you fertilize immediately afterwards."

Eric Halfman, John Deere's go-to-market manager for riding lawn equipment and utility vehicles

lawn more drought resistant.

The type of grass you have will determine when you should aerate the lawn. If you have cool-season grass like Kentucky bluegrass or a tall fescue, fall is a great time for aeration, although it can also be done in early spring. If you have warm-season grasses, such as zoysia grass, centipede grass, Bermuda grass, or St. Augustine grass, late spring and summer is ideal.

# OVERSEED

As winter turns to spring, you may notice bare patches of grass from salt or deicing agents around sidewalks or driveways or in heavily shaded areas that didn't get enough sun last summer. They could use some overseeding, which just means sprinkling some new seed on existing turf.

Fall is a smart time to overseed coolseason grasses, but it can also be done in early spring. You can also fix bare patches in warm-season grasses in the early spring, though if you have St. Augustine grass, purchase sod or plugs rather than seed. Before overseeding, remove any areas of thatch that built up to half an inch or more as explained in No. 2.

Once the thatch is removed, you may as well aerate the lawn. This step will help ensure that there's good solid seed-to-soil contact, providing the seed access to the water it needs to germinate. If you only have a small area to overseed, you can use a rake to rough up the soil and then lightly tamp down the seeds after spreading.

Before you overseed, make sure any existing grass is no more than 11/2 to 3 inches tall and the soil is moist. After sowing, keep the soil moist for several weeks, as seeds germinate and grass gets established. Light, frequent waterings are best. Plan on watering well during the summer months too since the root system won't be well established yet and the grass may not survive drought. When you overseed, you can apply a starter fertilizer to help give your new grass a boost and even apply a layer of mulch when you overseed to help the soil stay moist and protect the seeds from birds.

#### TREES & SHRUBS

Have you noticed that an overgrown shrub is impinging on your lawn or a tree has begun to block out so much sun that your lawn is now suffering?

Late winter or early spring is ideal for pruning many deciduous trees since you'll be able to see the tree branches better before they leaf out. An added benefit: Pruning before the growing season begins can also decrease the risk of infections like oak wilt.

You can also prune summerflowering shrubs in late winter and early spring; wait to prune springflowering shrubs until right after they have stopped flowering.

## PROBLEM

Do you have an area of your lawn that is a thorn in your side? Conquering trouble spots may simply require you to look at them from a different angle. Instead of fighting the same battle year after year. try something new. Here are two common problems and two clever, counterintuitive solutions to fix those tricky spots for good.

Problem 1: A dead patch where grass just doesn't seem to grow



Solution: Give up and grow something else there instead. Native plantings, for example, are likely to be easier to grow in this trouble spot, especially if the area gets several hours of sun each day. To convert the area, mow any existing grass or weeds, water well, and lay cardboard down over the area with a layer of mulch on top to weigh it down. Wait a few months to ensure any weeds or grass have died and allow the cardboard to break down. Then you can dig holes through the mulch and cardboard (which should be mostly decomposed) and transplant your favorite native plants. Be sure to select plants that match the soil and amount of sun on your site for the best results; consult the USDA Plant Hardiness Zone Map for guidance. After planting, add additional mulch if needed.

Problem 2: A ditch where unsightly weeds seem to thrive



**Solution:** Fix grading issues and reseed with a grass species suited to the area. Begin by excavating and grading as needed so that the bottom of the ditch is flat or slightly rounded rather than V-shape. Then rake the soil on the sides and the bottom (parallel to the ditch bottom) to ensure good seed-tosoil contact. If possible, choose native grass seed mixes that will grow long roots and help prevent erosion. It may be a good idea to mix two different types of seed, including one that may be good for shadier areas or one good for wetter areas at the bottom of the ditch, for example.

#### WHAT IS SOIL MADE OF?

Soil, the layers of material over the ground's surface, mainly consists of dead and living organisms, nutrients, particles (sand, silt, and clay), water, and air.





#### A LUSH, HAPPY LAWN STARTS WITH

MAKE THE MOST OF THE GROUND YOU'VE GOT.

BY KELLY ROBERSON

Everyone wants a vibrant, beautiful lawn, but not every lawn starts with the right foundation. If your lawn seems to struggle-in parts or as a whole-the problem may be deeper than the grass itself. The condition of your soil and the mix of nutrients feeding your lawn can determine whether your lawn thrives or dies. Fortunately, breaking down the science behind your soil and how to fertilize it is something you can master. Here's how.

#### What is soil, really?

You might refer to your lawn's soil as "dirt," but true soil is actually a mix of three ingredients: sand, silt, and clay, with an ideal combination of 40% sand, 40% silt, and 20% clay. This balance is called loam, and when you achieve it, your soil has what it needs to retain nutrients, drain excess moisture, and maximize air flow. It's a boon to whatever you plant.

#### So what happens if the soil ingredient ratio is off?

Several conditions can occur:

- · Too much sand means your soil won't retain nutrients or water and will dry out quickly.
- · Too much silt means your soil is sticky and may have trouble getting rid of excess moisture.
- · Too much clay makes drainage more difficult and requires more time to warm during the growing season.

#### How do you improve your soil's structure?

- · Use humus, peat moss, or nitrogen-enhanced sawdust to remedy sandy soil.
- · Add sand or compost to improve silty soil.
- · Work in compost, shredded leaves, or peat moss to loosen up clay soil.

#### HOW CAN YOU DETERMINE THE STRUCTURE OF YOUR SOIL?

There's a simple DIY test you can use to determine your soil's structure. You'll need a lidded glass jar, such as a Mason jar.



First, dig up some soil and fill the jar about half full; add water, leaving about a half inch at the top of the jar. Let the mix sit until the soil has absorbed the water. Then, give it a shake for two or three minutes. Wait at least a full minute, then measure the height of the soil that's settled at the bottom. That represents sand. Wait another two hours and measure again; the additional settled soil is your silt. Wait a full 48 hours, and measure once more; this represents the clay in your soil. If each of those measurements is 1 inch, for example, your soil is 33% sand, 33% silt, and 33% clay.

If you find that the makeup of your soil deviates widely from the 40-40-20 ratio, you can take steps to reengineer it and optimize the ratio for a healthier mix.

### What macronutrients does your lawn need to thrive?

If you've tested the pH balance of your soil and found it lacking, using macronutrients can both help improve your lawn's health and boost your soil's structure.

Having good loam can help your lawn thrive, but your soil also needs a balanced diet of macronutrients and the right pH so that it stays healthy and vigorous. Knowing what your current macronutrient mix and pH levels are can help you best judge how, when, and with what to fertilize or amend the soil.

Ideal pH for soils for lawns is between 6 and 7 (pH is simply a measurement of either acidity or alkalinity). If it's below 6, your soil is acidic; lime can help raise that number. If it's above 7, it's alkaline and could benefit from sulfur. In general, healthy lawns have adequate amounts of three macronutrients, each with a different function:

- Nitrogen (N) helps lawns grow tall, thick, and green, which in turn reduces the risk of disease.
- Phosphorus (P) generally helps lawns with vigorous growth.
- Potassium (K) helps lawns withstand temperature and moisture extremes.

#### How do I measure nutrient and pH level?

A soil test is your best bet. You can choose the DIY route and use one from a home improvement store (brands such as Rapitest are widely available). Or you can request a soil test kit from your state, typically through a county extension office (results may include texture, nutrient and pH levels, and organic material). In general, testing your

soil once each year gives you a good idea how to adjust your fertilizing routine for optimum lawn growth. You should test before you apply any fertilizer, preferably in the spring.

"Sometimes you can visually see issues too," says Eric Halfman, go-to-market manager for riding lawn equipment and utility vehicles at John Deere. "Dead grass, thinning areas, cracked soil, or soft roots are all signs your soil needs some attention."

#### What do I do when I get the soil test results?

If you requested a soil test through your county or state, it usually comes with fertilizing suggestions. Use these to determine what you need to fertilize your lawn. Your soil test results may also tell you what type of fertilizer, such as organic or inorganic, to use.

#### Can't I just buy a general-use product?

You could, but you shouldn't. Say your soil test suggests a 10/15/20 ratio of NPK, but you purchase fertilizer that has an 18/24/12 ratio. Not only are you not feeding your lawn what it needs, you're wasting money and could contribute to fertilizer runoff, which can harm water supplies and wildlife. (FYI, the numbers represent a percent of the total weight of the fertilizer, not a percent that equals 100.)

Instead, check the label on a product before purchasing it. You can get combo products or singlenutrient products. (Not sure how much to buy? Google "fertilizer

calculator" to help determine per square foot needs.)

#### When do I fertilize?

Most recommendations are to avoid the hottest months of the year. If you live in the North, generally fertilize in the fall; residents of the South should mark late spring on their calendars. See the month-bymonth lawn care guide on page 26 for more information.

#### What's the difference between organic and inorganic fertilizer?

Organic and inorganic fertilizers differ in a couple of key ways.

- · Organic fertilizers, made from plant or animal materials, take more time to break down and promote beneficial bacterial and fungal activity. But organic fertilizers are less suited for fall application, as lawns can't really break them down before colder temperatures set in.
- · Inorganic fertilizers are synthetic but are immediately available for your lawn to break down. If you need help fast, inorganic fertilizers may come to the rescue more quickly.

Whichever you choose, make sure the mix of nutrients matches the recommendations of your soil test.

Fertilizer typically comes in large bags, but spreading it by hand can be cumbersome and inconsistent. A better bet is to invest in a spreader. Spreaders are generally sold by area of coverage.

For very small lawns or small patches of lawn you're repairing, a hand-held spreader may do the trick. These are operated by turning a crank by hand while you stand over or walk around the area being fertilized.

Larger lawns can be covered with either push spreaders or tow-behind models that can hold up to several hundred pounds of fertilizer at once. Push-behind broadcast spreaders drop fertilizer in a predetermined radius, so consider one that has the ability to block fertilizer spread, which is helpful in preventing you from inadvertently fertilizing a flower bed with lawn fertilizer.

Push-behind drop spreaders, on the other hand, have a specified width but smaller coverage area with each pass, so you'll sacrifice speed for accuracy of coverage. Tow-behind models hook up to a lawn tractor to spread fertilizing products. With any spreader, you'll need to make careful work of the area you're fertilizing so you don't miss spots.

DRGANIC LAWN FOOD

Epsoma's All-Season lawn fertilizer is a solid choice for most grass types and widely reviewed as effective in enhancing grass growth.

In general, the smaller the spreader, the more passes you'll have to make for total fertilizer coverage. In addition, lighter weight fertilizers have a tendency to drift when applied, so consider your fertilizer choice and your spreader options before making a purchase.

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A few hundred bucks of supplies and a few hours of labor will get you an impressive ring of fire. 26

## THE COMPLETE LAWN CARE CALENDAR

A regional month-bymonth guide to a super healthy lawn.



# PART OF STREET O

Now that you're on the way to a beautiful backyard you have some duties to fulfill. First, maintain it. And second: make the most of it. Here's how to do both.



FROM SUNNY AFTERNOONS BY THE POOL TO DINNERS ON THE PATIO. THERE ARE PLENTY OF MOMENTS YOU'LL WANT TO SHIELD YOURSELF FROM PRYING EYES. HERE ARE THREE WAYS TO INCREASE YOUR PRIVATE TIME.

#### HAVING THE HEALTHIEST

patch of turf with a slick outdoor kitchen or a pool with crystal blue water won't help you and your guests relax if you lack privacy. As much as you like your neighbors, do you really want to lock eyes with Ron while he's watering his lawn and you're passing the ketchup? It might not be top of mind now when you're sharpening your tools or prepping your grass for growing season, but privacy is a yard feature that should not be overlooked.

Back in 1914, long before camera phones and social media, Robert Frost wrote "Good fences make good neighbors." Without a privacy plan, you can feel exposed and uncomfortable in your own backyard.

But having privacy is more than just creating a visual buffer that prevents unwanted eyes from crashing your party; it's also about enhancing your views by editing out what you don't want to see, like a neighbor with a

penchant for morning Zumba®, shortshorts, or sunbathing through a thicket of back hair. A barrier of plants, fencing, or some combo of the two is the most common way to enhance privacy for a range of budgets and DIY aptitudes. If you have the budget and need privacy ASAP, a fence will block most views at the ground level.

But if you don't mind waiting a few years for a wall of plants to create a green screen, using younger versions is a less expensive option. Before you grab a shovel, though, you'll need to know where your property line is and stay within that to ensure neither a new fence nor the mature width of a tree encroaches on your neighbors. Many towns cap residential privacy fences to 6 feet high, but there is usually no restriction on the size of trees or shrubs, which can, over time, offer the greatest level of privacy and aesthetics. Here's what you need to know about adding a little more seclusion to your yard.

BY SALVATORE VAGLICA ILLUSTRATIONS BY CURT MERLO





#### THE PLANT SOLUTION

If you think a fence is the only route to privacy, you've never tried to see through a 4-foot-thick wall of evergreens. A wide range of deciduous and evergreen trees (like Emerald Green "Smaragd" or "Green Giant" arborvitae) and shrubs can provide all the privacy you need while softening the yard's boundaries with a natural look. Though if you go with a deciduous tree, you'll want to factor in the falling winter leaves. Plant material requires a little more research upfront—to know your yard's growing zone, light, and soil conditions—but once established, trees and shrubs might only require occasional pruning for shaping or raking leaves. Just be sure to understand their mature width first so you can space them properly.

BEST FOR DIYers and those on a budget who are willing to wait a few years for plants to mature. When the budget allows for mature stock, expect to work with a landscaper or nursery to install them.

AESTHELISS: Great! A living wall is far more appealing than a wall of wood or PVC and often does a better job of blending into the natural environment of a yard.

TIME & MUNEY: From about \$5.70 per linear foot for a 1-gallon size Emerald Green arborvitae (that will reach 12 to 15 feet tall in 15 years) to about \$233 per foot for a 12-foot version of the same tree.

MATERIALS: Evergreen, deciduous, and flowering trees and shrubs.

PRIVAGY: Depends on the maturity of plants but can range from a screen to a solid wall.

#### THE FENCING SOLUTION

If your yard needs privacy in a hurry, it's hard to beat a view-blocking 6-by-8 foot swath of fence. Privacy fence panels come in three major materials—from classic dog—eared, pressure-treated pine, and composite versions that mimic the texture of wood decking to gleaming white PVC. Wood is the least expensive option upfront but often requires staining or painting to keep weathering at bay. Pricier PVC and composites are virtually handsoff, aside from occasional power washing. An ambitious DIYer might be able install a few panels, but putting up a whole yard worth of fencing should be left to a contractor. You may also need to dig a hole for sinking posts in concrete, so check for water, gas, or phone lines first.

BEST FOR: Homeowners who have a bigger budget and a need for immediate privacy around the yard or patio.

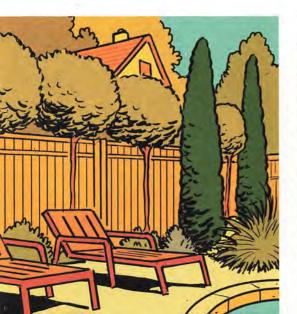
AESTHETICS: Varies from a solid wall of material to a half-open design but generally not as natural looking as plants. Some have a less desirable face with posts and rails that you might want to keep toward your yard.

TIME & MONEY: Starting at about \$9.40 per

foot for wood, \$14.50 for PVC, and \$40.50 for composite fence panels. The average cost to install a fence adds about \$3,000 to the project.

MATERIALS: Wood, PVC, or composite.
PRIVACY: Exceptional for privacy up to
6 feet, covering most grade level needs.
However, a fence might not be tall enough to
prevent views from a neighbor's second story.





#### THE COMBO SOLUTION

Combining plants with a fence is often the most aesthetically pleasing option, giving you a physical barrier (for, say, keeping pets in) while softening hard lines with plant foliage. This technique might rely on a fence with a more open design like a metal picket fence combined with an evergreen shrub that fills the voids between the vertical members. Or a layering design can be used in which a short fence rests in front of taller plants or when ivy or flowering vines use a fence to climb. A handful of large arborvitae in big planters might be all the privacy you need for an intimate party, and you can move them around as your needs change.

BEST FOR: Side yards that require the security of a fence or for a patio/deck.

AESTHETICS: A combination of materials is an elegant way to make a fence part of the landscape's overall design.

TIME & MONEY: A basic design starts at about \$16 per foot for immature arbor-

vitae and a simple wood fence, and goes to \$280 per foot for larger trees and more expensive composite panels.

MATERIALS: Evergreen plants and wood,
PVC, metal, or composite fence panels.

PRIVARY: Medium to high depending

on the plants and fence panels.

# Wciter 101

Maintaining a healthy, well-hydrated lawn is nothing to freak out about: Here's everything you need to know to strike a good balance without going overboard.

BY DAVE MOWITZ



# Everyone's obsessed with hydration these days,

but please don't apply the same preoccupation to your lawn. In fact, turf research has found that watering every day creates shallow-rooted plants that are vulnerable to drought. A team of turf scientists at the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) recommends irrigating less often but more deeply, which promotes deep-rooted plants and a healthy turf. Figuring out just how much water to apply and how often depends on where you live and what kind of grass you have.

#### Keep these variables in mind>



#### **The Step Test**

Step on your grass. If it doesn't spring back, it's probably time to irrigate, says the NRCS. Another sign of dehydration is in the color of the grass. As soils dry, lawns with inadequate moisture develop a dull to bluish gray cast.



#### **GEOGRAPHY**

The Southwest U.S. receives far less rain and gets higher temperatures than, say, the Northeast. So your best bet is to keep tabs on local weather, pay attention to forecasted rainfall, and survey your lawn during the week. Use your best judgment. And use the Step Test (see below to the left) to determine hydration level.



#### SEASON

Water requirements are lower in the spring, when you may never have to irrigate, and fall, when plant growth slows. Summer is generally prime time for watering—except for cool-season grasses like fescues and bluegrass. They naturally go dormant in the hottest months.



#### SOIL TYPE

At full water capacity, lighter sandy loam soils contain 2.4 inches of water per foot compared to 4.2 inches in heavier soils, such as silt loam. (If you don't know what type of soil you have, see page 12.) If your grass thrives in lighter soils, like fescue grass, you may have to water more often. As a rule of thumb, irrigate so that the soil is wet 4 to 6 inches deep. For light, sandy soils, this will take applying 1/2 to 1 inch of water. For clay-based, heavy soils, apply 1 to 11/2 inches of water.



#### FERTILIZATION LEVEL

If your soil is very fertile, grass requires less water to maintain. A well-fertilized lawn keeps thirsty, water-hogging weeds at bay. Fertilize according to recommendations and spread out your applications over three or four times during the growing season.

BG COLLECTION / GALLERY STOCK, ILLUSTRATIONS BY CHRIS PHILPOT REVIOUS PAGE, SHUTTERSTOCK, THIS PAGE(CLOCKWISE FROM BOTTOM LEFT); GETTY IMAGES, SHUTTERSTOCK(2), STOCKSY, DAN SAELINGER

#### **Watering New Grass**

The one type of grass you absolutely should water every day is newly seeded grass. It should be watered lightly at least four times daily. This encourages seeds to germinate and put down roots. Keep seeds moist during the establishment phase with light and frequent irrigation cycles, says Tyler Carr, a turf specialist at Ohio State University. Once your grass seed begins producing new blades, reduce the frequency of irrigation while you increase the depth like you would for more mature grass. Learn more about watering new seedlings by going to Ohio State's Turfgrass Establishment Series: buckeyeturf.osu.edu.

#### The Best Time to Water

Early morning, hands down. Watering at this time allows your grass to absorb the water throughout the day, plumping up blades, which gives them the armor they need to endure the heat of the day. Also, there's usually less wind in the morning, which affects the uniformity of sprinkler nozzles and can also cause rapid evaporation. An alternative is to water in the late afternoon or early evening. Just be sure to give your turf time to dry out before dark, as letting moisture linger overnight could lead to fungal diseases.

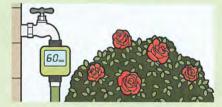
#### **Conduct a Sprinkler Audit**

OK, so this may sound a *little* obsessive, but turf experts recommend conducting an assessment at some point.

Wait ... audit my sprinkler? Yes, otherwise how will you know how much water is being doled out? To conduct the audit, set three or more flat-bottom cans at various locations on the lawn at least 4 feet from (but within range of) the sprinkler heads. Turn on the water for 15 minutes. Using a ruler, measure the depth of water in each can. Averaging these measurements gives you an applied amount.



#### **IRRIGATION TOOLS** Regardless of the irrigation method you employ, consider adding these tools to your watering arsenal.



#### Flow Control Meter

This device is installed between the faucet and your hose to monitor the amount of water being used. Some meters feature an automatic shut-off that prevents wasteful overwatering.



#### **Automatic Timer**

This shuts off water at a designated time and is either plumbed into an in-ground system or attached to a faucet like the flow control meter.



#### Programmable Controller

This intelligent controller receives information from your smartphone regarding plant data and weather forecasts. This information is calculated to create a program that turns water on and off automatically, according to your lawn's needs.

# RING OF FIRE

Use pavers for an easy, inexpensive DIY firepit.

#### What You'll Need:

#### **EQUIPMENT** & TOOLS

- Tape measure
- · Shovel
- Rake
- Wheelbarrow
- Tamper
- · Level
- Mallet

#### MATERIALS

- · Stake
- String
- Spray paint
- Gravel
- Modular retainingwall units
- Coarse concrete sand
- Concrete adhesive
- Pavers (optional)
- Plastic or aluminum edge restraint (optional)
- Fire ring

#### Extend your outdoor season into the cooler

backyard project. Modular retaining-wall units, a.k.a. angled pavers, form a perfect circular wall around the fire ring, while a simple gravel bottom will level the pit and contain the fire. You can easily adjust the size of the pit by adding pavers and extra gravel. Just follow our step-by-step instructions, and you'll have your own cozy backyard pit fired up by the end of the weekend.

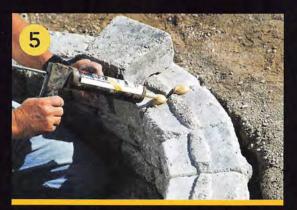




Outline the Firepit > Site the pit on a flat area about 12 feet in diameter. Place the stake at the center of your circle (ours is 56 inches in diameter), tape the spray paint can to a string attached to the stake, and mark a circle.



Mark Inner Circle > Use the stake, string, and paint to mark an inner circle guide for placing the first layer of retaining-wall units. Our inner circle is 38 inches in diameter. If you're using a fire ring for your firepit, place it in line with the painted circle.



Finish Rows > Add the second row of retaining-wall units. Many pavers feature a groove on the bottom and a ridge on top, allowing the rows to interlock. Continue adding rows of blocks to reach the desired height. Add the top row of blocks and glue them in place with concrete adhesive. Make sure the blocks are clean and dry before you apply the adhesive.



Create a Base > Dig out the dirt within the circle to about 18 inches deep, creating a level circle. Fill the pit with 6 inches of gravel. Rake smooth and tamp after each load to make a solid base. Spread a layer of coarse sand over the gravel, tamping and leveling as you go.



Place First Row > Place the first row of retaining-wall units in a circle. Use the mallet to set them in the sand and gravel. Check that it's level from side to side and front to back after you place each unit.



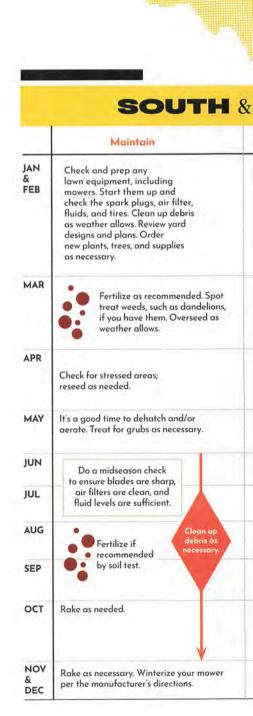
Optional: Install Ground Pavers > To surround the firepit with pavers, create a 6-inch gravel base topped with 1 inch of coarse concrete sand. Lay the pavers in the pattern of your choice. After the pavers are in place, install a plastic or aluminum-edge restraint. Sweep concrete sand into the joints until the joints are full. Compact the surface with a hand compactor or rent a plate contractor.

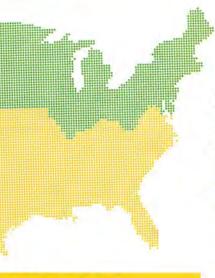
# THE COMPLETE LAWN CARE CALENDAR

Wanna give your grass its best year ever? Follow this month-by-month guide and reward yourself with the happiest lawn around.

#### BY KELLY ROBERSON

	Maintain	Water	Mow
JAN & FEB	Check and prep any lawn equipment, including mowers. Start them up and check the spark plugs, air filter, fluids, and tires.	None	Have your mower's blades sharpened or do it yourself.
MAR	Clean up debris as weather allows. Review yard designs and plans. Order new plants, trees, and supplies as necessary.	None, but now's a good time to check your	Lawn should be actively growing. Mow according to recommendations for your grass type.
APR	Fertilize as recommended. Check for stressed areas; reseed as needed	rainfall measurement system if you have one.	
MAY	Spot treat weeds, such as dandelions, as necessary.	Probably none, but continue to monitor rainfall totals to ensure your lawn receives 1 inch per week.	Mow a
JUN	Treat for grubs as necessary.	Water as	Raise mowing height as temperatures
JUL	Do a mid-season check: are blades	necessary if rainfall levels are under 1 inch	increase.
AUG	sharp, air filters clean, and fluid levels sufficient?	per week.	Suspend mowing if grass begins to brown,
SEP	Aerate and/or dethatch.	Gradually decrease watering as lawn transitions into dormant season.	If lawn is healthy, lower mowing height as needed.
ост	Rake or mulch leaves. Fertilize according to the recommendations for grass type and region.	None	Time your final mow post frost, but leave grass several inches high.
NOV & DEC	Rake as necessary. Winterize your mower per the manufacturer's directions.		None





#### Pay attention to the following:

COURTESY JOHN DEERE

- Mariance Appearance
- ≥ Trouble spots
- Average mowing height
- **™** Total rainfall
- ▲ Total supplemental watering



# MAKE THE FIRST CUT COUNT

A few quick rules: Your lawn shouldn't be too wet, so give it some time to dry out if it is. Set your mow height high so that you're not making a close cut. At this point your goal is simply to level out the grass and to keep it thick and healthy. Leaving the clippings is fine too; you're returning organic matter to the lawn.

#### WEST

Water	Mow	
None	Have your mower's blades sharpened or do it yourself.	
None, but now's a good time to check your irrigation system if you have one.	Lawn should be actively growing. Mow according to recommendations for your grass type.	
Water as necessary if rainfall levels are under 1 inch per week.	Raise mowing height as temperatures	
	Suspend mowing if grass begins to brown.	
Water as necessary.	If lawn is healthy, lower mowing height as needed.	
Gradually decrease watering as lawn transitions into dormant season.	Stop mowing when your lawn stops growing.	
None	None	

#### N. CENTRAL & N. EAST

	Maintain	Water	Mow
JAN & FEB	Check and prep any lawn equipment. Start mowers up and check the spark plugs, air filter, fluids, and tires.	None	Have your mower' blades sharpened or do it yourself.
MAR	Clean up debris as weather allows. Review yard designs and plans. Order new plants, trees, and supplies as necessary.		
APR	Fertilize as recommended. Check for stressed areas; reseed as needed.	Begin monitoring rainfall totals and check your irrigation system if you have one.	Lawn should be actively growing. Mow according to recommendations for your grass type.
MAY	Spot treat weeds, such as dandelions, as necessary.	Probably none, but monitor rainfall totals to ensure your lawn receives 1 inch per week.	Maw
JUN	Treat for grubs as necessary.	0	Raise mowing height as
JUL	Do a mid-season check: are blades	Water as necessary if rainfall levels are under I inch per week.	temperatures increase.
AUG	sharp, air filters clean, and fluid levels sufficient?		Suspend mowing if grass begins to brown.
SEP	It's a good time to aerate and/or dethatch.		If lawn is healthy, lower mowing height as needed.
ост	Rake or mulch leaves. Fertilize according to the recommendations for your grass type and region.	0	Time your final mow post frost, leaving grass several inches high.
NOV & DEC	Rake as necessary. Winterize your mower per the manufacturer's directions.	None	None



# PART

What's the point of maintaining a gorgeous yard without friends and family to tell you how amazing it is?
We give you three excuses to invite them over.

# 30

#### HOME FIELD ADVANTAGE

If you build it, they will play.
A DIV guide to backyard
badminton, volleyball,
soccer, and croquet.

# 34

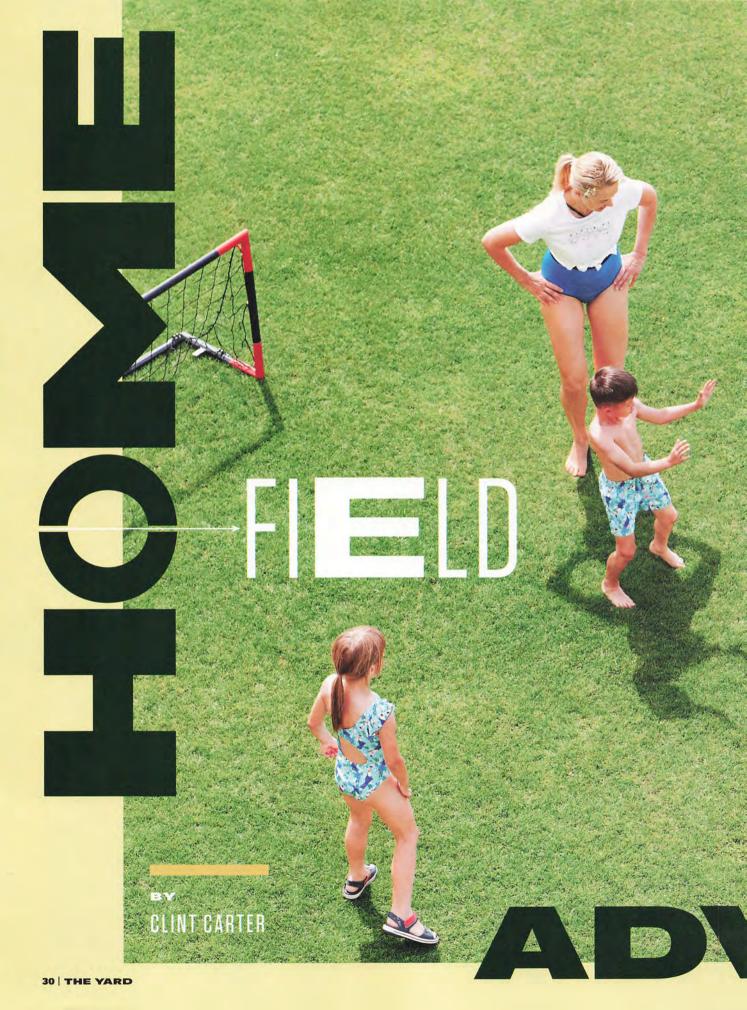
#### KING OF THE GRILL

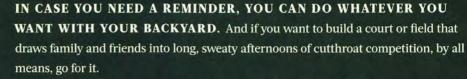
Four crowd-pleasing ways to upgrade your outdoor cooking.

# 40

#### BLUEPRINT

How to make your own custom cornhole board.





Having a game-ready yard may even do you some good: Studies indicate that people who spend more time under an open sky sleep better and view the world with more optimism. They also have a lower risk of chronic disease, and they're less likely to experience anxiety or depression.

But no one plays anything for the health benefits. Games are all about fun, even when that fun comes from perfecting a penalty kick or crushing your loved one in a hotly contested croquet match.

If you have a bit of open, level land, you have everything you need to create a shrine to sportsmanship that becomes part of your family's daily life, with no charger or login required. Here are four suggestions for a more sporting outdoor life.

FOUR WAY'S to transform your backyard into a personal field of dreams

ANTAGE

# VOLLEYBALL & BADMINTON

A rock-free yard and trimmed grass is a good starting point, but when you're ready to make it more official, take the extra step by marking your court and setting some boundaries.

MATERIALS: In addition to a net. you'll need measuring tape, string, nails, and a can of spray-on field-striping paint.



MAKE THE SPAGE: An official badminton doubles court measures 44 feet by 20 feet. For volleyball, it's slightly bigger at 59 feet by 29.5 feet. If you don't have enough space, work with what you've got. Just be sure your court is roughly twice as deep as it is wide.

To frame your court, measure the boundary lines and pin the string in place with nails. Once it's marked, make sure you have a proper rectangle with 90-degree corners. Make any necessary adjustments, and once you're happy, use your field-striping paint to mark the lines.

**PRO TIP:** Crawling on the ground with spray paint is as cumbersome as it sounds. "The problem you're going to have is painting the lines straight," says Frank Rossi, Ph.D., a professor of agricultural sciences at Cornell University. So consider a line-marking wand, which has a trigger on one end and a rolling spray-paint holster on the other, allowing you to walk upright. They are about \$40.



SOCCER Quick pivots and slide tackles are tough on a yard.
To prepare it for abuse, you'll want a strong grass varietal that's at least a couple of inches long.

WHAT YOU'LL NEED: In addition to a mower, you'll need grass seed and nitrogen fertilizer. And don't forget your soccer goal.



DEFEND YOUR GRASS: If you live in the North, Rossi recommends Kentucky bluegrass or tall fescue. For Southerners, he suggests seed or sod with Bermuda grass. "These grasses have underground structures that knit the soil together and provide stability," he says. Plus, underground growth helps grass spread into bare spots. "If a plant goes away, a new one will eventually fill back in," he adds.

For maintenance, fertilize the grass regularly to maintain consistent growth (two to four times per year) and keep it as high as you can handle. Length is strength, says Rossi. Trim too low, "and the next thing you know you're playing on a mud patch." So don't cut any shorter than 2.5 inches. That's roughly what you'll find on the typical highschool field. "And if you're willing to put cleats on," he says, "the height of the grass doesn't actually matter."

**PRO TIP:** As soon as you see weak spots in the grass (probably around the mouth of the goal), throw down more seed. "You have to understand that it's a war of attrition," says Rossi. "So the more traffic you get, the more nitrogen fertilizer and seed you need to use."

# REVIOUS SPREAD. IVAN GENERISTOCKSY THIS SPREAD(CLOCKWIS) ROM TOD RIGHT). ORFSET/SHUTTERSTOCK, COURTESY AMISH OY BOX, MEL KARLBERGISTOCKSY, PLAIN PICTURE, COURTESY



# CROQUET

Professional six-wicket croquet is played on grass trimmed to just a few millimeters. That's impossible without expensive equipment and expert groundskeeping. So for at-home play, go with the more forgiving nine-wicket croquet, which is played on grass longer than one-quarter inch.

**MATERIALS:** Balls, mallets, two stakes, nine wickets, four corner flags, and boundary lines or striping paint.

**MARE THE SPAGE:** The standard nine-wicket court measures 50 feet by 100 feet. If you don't have that much space, scale down while preserving the 1-to-2 ratio. Measure your field, plant your corner flags, and mark the lines between them with string or paint. Hammer a stake at one end of the court, 6 feet in from the boundary line. Measure 6 more feet in to place the first wicket and 6 feet again for the second. Repeat at the other end of the field, and then plant your fifth wicket in the center of the court. Arrange the last four wickets into a big square around the central wicket, with each one measuring 6 feet from a longer boundary line.

**PRO TIP:** For competition-worthy grass, you have to address soil drainage, says Rossi. Top-dress your yard with a quarter inch of compost every year or so. The organic matter will improve soil structure so water passes through easier.

## **BOCCE**

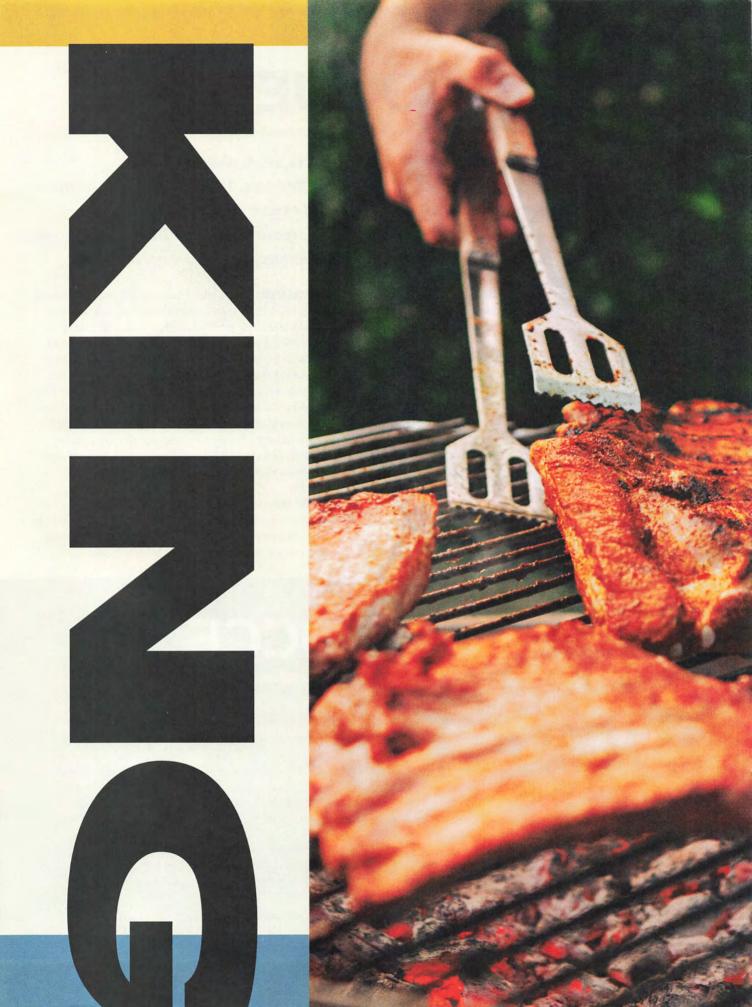
MATERIALS: For tools, you'll need a tamper or heavy lawn roller, and you might consider renting a sod cutter to remove grass. For the court, get 2-by-10 planks, weed cloth, landscaping staples, and bags of paver base and decomposed granite.

For serious play, you'll want to fill a wooden frame with a few tons of rock. It'll take some work, but you won't regret it.

MAKE THE SPAGE: For casual bocce, 60 feet by 12 feet is an accepted court size. But you can go shorter if you're working with a budget or limited space. On flat ground, measure the court and remove 2 inches of dirt from inside the perimeter. Line it with weed cloth, pin it with landscaping staples, and then frame it with the 2-by-10s. You'll want to reinforce the frame with rebar or 4-by-4 posts.

Once the frame is built, fill it with 2 inches of paver base, tamp it flat, top it with 2 inches of decomposed granite, and tamp again. For a smoother, pro-level surface, consider adding a final layer of oyster shell and flour. This is what the pros use.

**PRO TIP:** Keep the court level with a leveling tool called a screed. To build it, cut a 2-by-4 long enough to rest on the sideboards. Then cut a second 2-by-4 the width of the court so it fits inside. Screw the boards together and drag the tool over the court to level the surface.







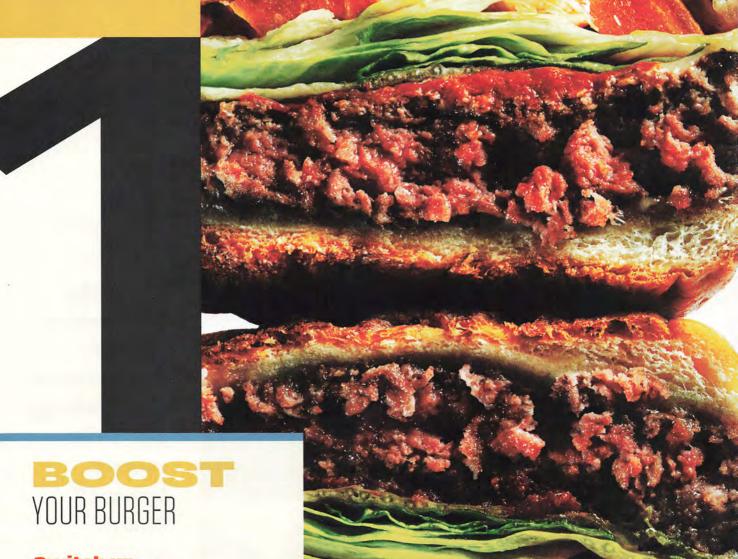






Ready to take your outdoor cooking to the next level?

Read on for expert advice, mouthwatering recipes, and smart product picks for better burgers, brats, and more.



# Switch up your burger blend.

Go beyond standard ground beef for improved flavor and texture. "Talk to your butcher about what's on offer as far as different blends go, and don't be afraid to try something different," says Joe Gurrera, owner of gourmet store Citarella in New York City. He's a fan of his ultimate dryaged burger, which combines dry-aged sirloin, short rib, and brisket that taste super meaty together.

meat contracts. So patties that are a little thicker in the middle will turn into meatballs after cooking, says chef Robert Irvine, host of Food Network's Restaurant Impossible. "You get a tiny amount of meat in each bite near the edge and way too much in the middle. That's why you want to make patties slightly thinner in the center. Use your thumbs to make a small divot in the middle. It will disappear as the meat shrinks during cooking, and you'll wind up with a perfectly uniform burger."



# PRO TIP: ADD BUTTER!

Fat is essential to cooking burgers, and adding buttery flavor is a bonus. Freeze a stick of butter and grate it into your burger blend so the butter is mixed into each patty. When this combo hits the grill, you'll be rewarded with creamy, buttery goodness.



# PUT YOUR SEAR IN REVERSE

Many barbecue experts can't stop talking about their new go-to steak-grilling strategy: the reverse sear. It results in remarkably juicy meat with a crunchy, satisfying crust. Best for a thick cut (about 1½ inches), such as New York strip or ribeye.

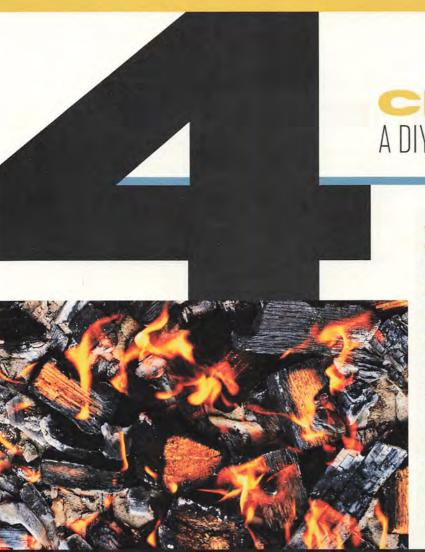
- PREPARE A TWO-ZONE FIRE ON YOUR GRILL. For a gas grill, light all burners
  until it preheats, then turn off the center burner for a cool zone to
  cook indirectly. For a charcoal grill, with vents open, ignite 50 to 75
  briquettes for a 22-inch grill. Once the coals look covered in ash, push
  them to opposite sides of the grill to create a cool zone in the center to
  cook indirectly. Place rack on grill.
- PLACE STEAKS OVER THE INDIRECT FLAME and cook the meat low and slow with the lid closed. The grill temperature should be about 300°F.
- REMOVE STEAKS from the grill once they reach 100°F internally.
- ADJUST YOUR GRILL TO HIGH HEAT or about 450°F to 500°F by igniting more briquettes (for charcoal grills) or igniting the center burner on high (for gas grills).
- PLACE STEAKS BACK on the now-hot grill and sear, turning often until
  well browned. This should take four or five minutes.

SLAYTHSKEWER

**Opt for two skewers** instead of just one to help prevent meats and veggies from twirling around as you flip them. By securing your food with two skewers, you can turn them around on the grill with ease, ensuring even cooking all around.

# Don't skimp on meat or veggies

when you're threading them on skewers. Kabob ingredients, such as chicken pieces, will stay juicier longer if they're touching one another (but not crammed) on skewers.



# ADVSMOKER

Turn your gas or charcoal grill into a smoker with just three components: water, a tin pan, and wood chips. For a charcoal grill, place charcoal briquettes with pre-soaked wood chips over one half of the grill and lay a disposable tin pan filled halfway up with water or apple juice (for added flavor) on the other. The liquid will help regulate the temperature and maintain moisture as you cook your meats low and slow. As the wood chips smolder, they'll impart the delicious, smoky flavor of real-deal barbecue. If you're using a gas grill without a designated wood chip compartment, place your presoaked wood chips in a tin pan, cover with tin foil, and poke holes for ventilation. Light the arill underneath the chips and cook on the opposing side to circulate the smoke flavor and infuse your meats.

# FLAVOR BOOSTERS Take your pick from this taste-boosting trio to amp up your next cookout.



# All-Purpose Spice Rub

This traditional rub works on meat, fish, and veggies—or just about anything.

Combine ¼ cup sweet paprika, ¼ cup plus 2 tsp. kosher salt, 2 Tbsp. light brown sugar, 4 tsp. garlic powder, 4 tsp. onion powder, 4 tsp. dried oregano, 4 tsp. orange zest, 2 tsp. freshly ground black pepper, and 1 tsp. cayenne in a medium bowl. Use your fingers to rub sugar and zest evenly through dried spices. Store in an airtight container at room temperature for up to one month.



# Garlic Soy Marinade

This Asian-inspired marinade can be made ahead and frozen for up to three months.

Combine 1/s cup reduced-sodium soy sauce, ¼ cup finely chopped green onions, 3 Tbsp. vegetable or olive oil, 2 Tbsp. Worcestershire sauce, 2 Tbsp. balsamic vinegar, 1 Tbsp. packed brown sugar, 1 Tbsp. fresh thyme leaves or chopped fresh Italian parsley, 2 cloves minced garlic, ¼ tsp. black pepper, and ¼ tsp. crushed red pepper in a small bowl, whisking to dissolve brown sugar.



# South Carolina Mustard BBQ Sauce

Pair this easy, sweet-tangy mustard sauce with pork or chicken.

Whisk together 2 cups of yellow mustard, 1/2 cup packed light brown sugar, 1/2 cup honey, 1/2 cup apple cider vinegar, a few dashes of cayenne pepper, and black pepper to taste in a medium saucepan. Cook over medium, stirring often until sugar and honey are dissolved and mixture is just beginning to bubble, 4 to 5 minutes. Remove from heat, and cool to room temperature about 30 minutes. Store in the refrigerator for up to 3 months.

# THE GRILL MASTER'S TOOLBOX

Keep your food tasting delicious and safe with these pro-approved grilling accessories.



# Kona 360° Clean Grill Brush

With three separate brushes in a side-by-side configuration, this brush cleans the top and sides of grates all in one swipe. The stainless steel bristles won't rust or corrode, and the design makes it less likely for them to come loose and end up on your steak.



# ThermoPro TP620 Meat Thermometer

With a two-second read time and smart features like 180-degree probe rotation and magnetic backing, this model is worth the extra cost. You can even lock in the temperature reading so you don't lose the measurement when you remove the probe from the meat.



# Grill Rescue BBQ Grill Brush

If you prefer a bristle-free brush, this one has an absorbent foam head made of aramid fiber, a heat-resistant material used in firefighters' gear. It's designed to work on hot grills by using steam to clean. The scraper removes more stubborn caked-on food.



# RECIPE

Everything goes better with beer and bacon, including this crowdpleasing mashup. Top with our Midwest slaw to add tang and crunch.

Prep Time: 30 minutes
Marinate Time: 6 hours
Cook Time: 10 minutes
Grill Time: 5 minutes
Yield: 5 sandwiches

# BACON-WRAPPED BRATS

### **INGREDIENTS**

- 5 uncooked bratwurst links or turkey bratwursts (about 1 lb.)
- •1 12-oz. can dark German beer, desired beer, or 1½ cups beef broth
- 1/2 cup coarsely chopped onion (1 medium)
- · 3 Tbsp. bottled steak sauce
- 2½ tsp. smoked paprika or sweet paprika
- 4 cloves garlic, coarsely chopped
- 5 slices uncooked bacon
- 5 hot dog buns, round hard rolls, bratwursts buns, hoagie buns, or other crusty rolls, split and toasted
- 5 Tbsp. coarse ground mustard

# DIRECTIONS

- 1. Use the tines of a fork to pierce the skin of each bratwurst several times. Place bratwurst in a large resealable plastic bag set in a shallow dish. For marinade, stir together beer, onion, steak sauce, paprika, and garlic. Pour over bratwurst; seal bag. Marinate in the refrigerator for 6 to 24 hours, turning bag occasionally.
- 2. Transfer bratwurst and marinade to a large saucepan. Bring to boiling; reduce heat. Cover and simmer for 10 minutes.
- Meanwhile, in a large skillet, cook bacon until brown but not crisp. Drain on paper towels.
- 4. Using tongs, remove bratwurst from saucepan; discard marinade. Let bratwurst cool slightly. Wrap a slice of bacon around each bratwurst; secure with wooden toothpicks.
- 5. For a charcoal grill, grill bratwurst on the rack of an uncovered grill directly over medium coals, for about 5 minutes or until brown and bacon is crisp, turning often. (For a gas grill, preheat grill. Reduce heat to medium. Grill bratwurst on grill rack over heat. Cover; grill as directed.)
- Remove and discard toothpicks from bratwurst. Serve bratwurst on rolls with coarse ground mustard and Tangy Midwest Slaw.

# TANGY MIDWEST SLAW

### **INGREDIENTS**

- 1/3 cup mayonnaise
- •1 Tbsp. rice vinegar or white wine vinegar
- •1 Tbsp. sweet pickle juice
- 1/4 tsp. celery seeds
- 1/8 tsp. hot pepper sauce
- 2½ cups packaged shredded cabbage with carrot (coleslaw mix) or shredded green cabbage

### DIRECTIONS

In a medium bowl, stir together everything but the cabbage/slaw mix. Then add coleslaw mix; toss to coat.

# HOW TO BUILD A CUSTOM CORNHOLE BOARD

What's a proper backyard hang without a beanbag toss to bring out your competitive nature? Here's how to build a custom board of your own.

# The Plan

### **CUT LIST**

- Board long sides (4): 11/2 x 3 x 477/8-inch plywood
- Board short sides (4): 11/2 x 3 x 207/8-inch plywood
- Leg connectors (2): 11/2 x 3 x 175/8-inch plywood
- Legs (4): 11/2 x 3 x 125/8-inch plywood
- Board tops (2): ½ x 23<sup>7</sup>/8 x 47<sup>7</sup>/8-inch plywood

## SUPPLIES NEEDED

- Table saw
- Sheet of 1/2 x 48 x 96-inch AB plywood
- Five 2 x 4 x 96-inch plywood boards
- · Pencil
- · Jigsaw

- · Wood clamps
- · Miter saw
- Sandpaper and/or router
- Power drill with bits
   (Phillips, pilot, and <sup>3</sup>/8-inch)
- 3-inch deck screws
- · Wood putty
- · Putty knife
- · Wood glue

- · Nail gun with nails
- Primer
- Paint
- Four 1/8-inch wood shim
- Four 3/8-inch carriage bolts
- Four <sup>3</sup>/8-inch fender washers
- Eight 3/8-inch lock nuts



# 1. CUT A HOLE

Using a table saw, make cuts according to the list above. Mark a circle on one plywood board top by measuring down 9 inches from the top of the board. Using a compass, draw a 6-inch circle around. Cut the hole in the plywood board using a jigsaw. Clamp that board onto the other plywood board top and trace the circle for matching holes.



# 2. MAKE LEGS AND STAND

Using a miter saw, cut one end of each leg at a 27-degree angle. At the opposite end of each leg, measure in 1 <sup>5</sup>/6-inch from the sides and top. Place compass point at that spot, then use the compass to mark a rounded end. Cut your traced edge. Smooth edges with a router or sandpaper.



# 3. CONNECT LEGS

Place a 17 5/8-inch leg connector board between two legs. It should form an H, with both rounded edges facing the same direction. Attach with screws; fill holes with spackle.



# 4. MAKE FRAME

Assemble the frame that will support the top with the hole. Butt two 20 <sup>7</sup>/8-inch short sides between two 47 <sup>7</sup>/8-inch long sides to form a rectangle. Clamp to keep frame square, then screw it together. Place a bead of glue along the top edges of the frame and set the plywood surface on top. Nail top to frame. Repeat with remaining sides and top to create the second board.



# 5. SAND SMOOTH

Route around the outside edges until smooth and ensure the frame and top are flush. Wipe away any sawdust with a tack cloth when finished.



# 6. PAINT BOARD

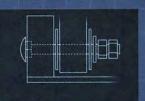
Prime and paint legs and board surface separately. Put your own artistic spin on the board. Let dry.

# 7. DRILL HOLES FOR LEGS

Bore a <sup>3</sup>/8-inch hole through the legs at the center point of the rounded ends. Flip the board upside down and place <sup>1</sup>/8-inch shims at the



corners in an L-shape along the inside base and top edge of the board. Set the leg configuration within the shims, place drill bit through the leg holes, and drill a <sup>3</sup>/8-inch hole into the cornhole frame. Repeat on the opposite side and with the second cornhole board.



### 8. ATTACH LEGS TO FRAME

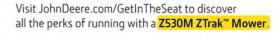
Remove spacers. Thread the carriage bolt through the frame from the outside in. Thread the remaining materials onto the bolt in the following order: one fender washer, the leg, a second fender washer, a lock washer, and two <sup>3</sup>/8-inch nuts. Secure tightly and repeat on the second side and for the second cornhole board.





How can we describe the joy of a Z530M ZTrak™ Mower? Well, we could tell you all about its time-saving speed. Or the precision cut of the Accel Deep™ Mower Deck. Even the relaxation of the ComfortGlide™ suspension. But to really understand the feeling you'll get from a Z530M ZTrak,™

# YOU JUST HAVE TO GET IN THE SEAT.

















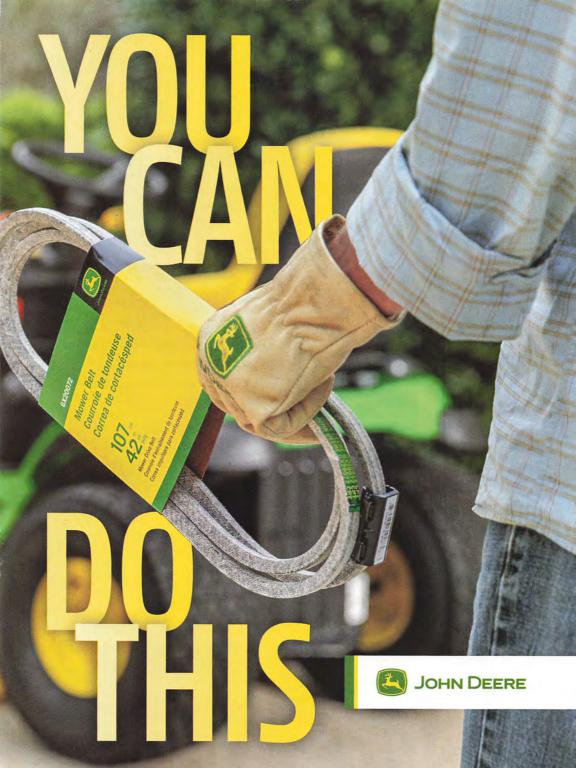


We could tell you about how versatile a John Deere 1 Series Tractor is. We could go on and on about how easy it is to use, how quickly you can swap out implements, and how it'll tackle just about any job. We could even go into detail about the low monthly payments. But if you really want to know what a 1 Series Tractor is about,

# YOU JUST HAVE TO GET IN THE SEAT.

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# GELACUITATION OF THE PROPERTY OF THE PROPERTY



Just a little time, effort, and maintenance are all it takes to keep your mower running like new. So roll up your sleeves and order a Home Maintenance Kit for your John Deere today. And while you're at it, stock up on other key maintenance parts – like belts and blades – and handy items for your workshop.

ORDER YOUR PRODUCTS SHOP DEERE COM





Small cracks and sidewall damage are indicators that your lawnmower belt may be due for replacement. If so, get the right belt from John Deere.



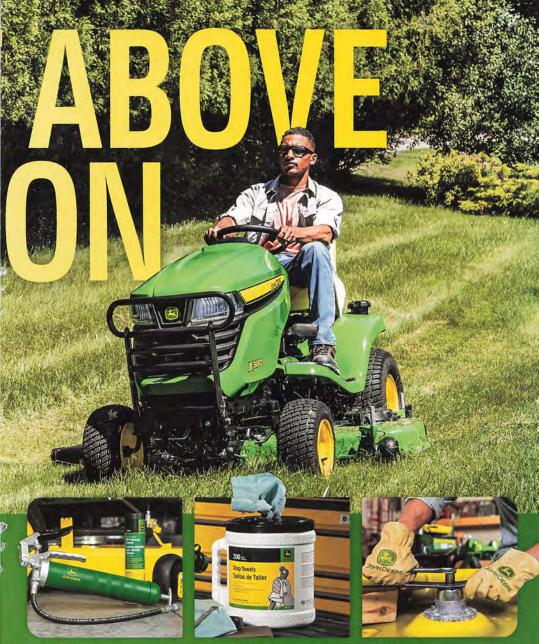
### BLADES

Uneven grass cutting and torn grass blades are signs that a new blade may be necessary for your lawnmower. Check for dents, dings, and cracks and replace as needed with a durable John Deere blade.



# TURF-GARD™ OIL

Engine cleanliness, wear protection, and fuel efficiency are what you get from Turf-Gard. The 4-cycle gasoline engine oil is made specifically for your John Deere mower.



# **GREASE GUN**

Keep the moving parts on your lawnmower greased to prevent wear and breakage. With a grease gun from John Deere, you can easily keep the front axle and mower deck spindles in good working order.

# **SHOP TOWELS**

Easy on the hands for cleanup — and durable enough for grease and oil absorption — John Deere Shop Towels are a great addition to a do-it-yourselfer maintenance operation.

# **WORK GLOVES**

Protect your most important tools with John Deere work gloves. With a variety of styles available, you can always find the right pair for the job at hand.

